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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/657,509	09/08/2003	Kazuaki Nakamura	KON-1818	9322
20311	7590	02/10/2006	EXAMINER	
LUCAS & MERCANTI, LLP			CHEA, THORL	
475 PARK AVENUE SOUTH			ART UNIT	
15TH FLOOR			PAPER NUMBER	
NEW YORK, NY 10016			1752	

DATE MAILED: 02/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/657,509

Applicant(s)

NAKAMURA ET AL.

Examiner

Thorl Chea

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-9 and 15-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2-9, 15-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on September 19, 2005 has been entered.

2. The rejections of claims 1-10, 13, 15-17 under 35 USC 102(b) as being anticipated by or, in the alternative, under 35 USC 103(a) as obvious over Oya et al (US 2001/0051319) paragraph 3; the provisional rejections of claims over the copending application 10/336,920, copending application 10/631,910 and the judicially created doctrine of obviousness-type double patenting as being unpatentable over the claims of US Patent No. 6,699,649 set forth in paragraphs 5-8 are withdrawn in view of the amendment on August 29, 2005 and the Terminal Disclaimers filed on December 30, 2005.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2-9, 15-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Fukui et al (US 2002/0102502), Patent Specification 1543266 (PS'266) and Oya et al (US 2001/0051319).

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See the material discloses on pages 38-41, claims 1-20, especially the compound of formula (I), (II) in claim 1, the compound of formula 9III) in claim 11; the molar ratio of compound of formula (I) to formula (II) of 0.001 to 0.2. See also the generic formula (III, and the its exemplified compound on page 6-10. The compound of formula (1) of Fukui contains L as CHR^{13} - wherein R^{13} is an hydrogen or an alkyl group having 1-15 carbon atoms. See page 3, column 1. Fukui et al fails to specifically discloses whether R11 and R12 are each a hydrogen atom, membered non-aromatic ring group or a 5- or 6-membered aromatic ring group, provided that R11 and R12 are not hydrogen atoms at the same time claimed in the present invention. However, the groups as claimed have been known as an equivalent to the alkyl group of Fukui et al and discloses in PS'226 on page 15, lines 10-15 which discloses the alkyl, aryl, and phenyl group as substituent for the phenol compound useful in heat-developable material and Oya et al, compound of formula (1) on page 1, column, and on page 3, column 1, [0027] disclosed that V^9 is a cyclic alkyl. It would have been obvious to the worker of ordinary skill in the art at the time the invention was made to associate a group known as equivalent to the alkyl group taught in PS'226 such as the aryl group or phenyl group with the phenol compound taught in Fukui et al with a reasonable expectation of achieving a highly useful photothermographic material that give an image with good tone, and thereby provide a photothermographic as claimed. A prima facie case of obviousness may be made when chemical compounds have very close structural similarity and similar utilities. "An obviousness rejection based on similarity in chemical structure and function entails the motivation of one skilled in the art to make a claimed compound, in the expectation that compounds similar in structure will have similar properties." In re Payne, 606 F.2d 303, 313, 203 USPQ 245, 254 (CCPA 1979). See In re Papesch, 315 F.2d

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381, 137 USPQ 43 (CCPA 1963) (discussed in more detail below) and *In re Dillon*, 919 F.2d 688, 16 USPQ2d 1897 (Fed. Cir. 1991) (discussed below and in MPEP § 2144) for an extensive review of the case law pertaining to obviousness based on close structural similarity of chemical compounds. See also MPEP § 2144.08, paragraph II.A.4.(c). In this case, the bisphenols compound have been known as reducing agents for silver ion, and the worker of ordinary skill in the art would either used a known phenol reducing agents having similar utility as reducing agent for silver ion such as shown in either Oya et al or Patent Specification 1543266 (PS'266) with an expectation of reducing silver ions and producing silver image.

Response to Arguments

5. Applicant's arguments filed August 29, 2005 and on December 19, 2005 have been fully considered but they are not persuasive. It is the Examiner's position that the invention as claimed is not persuasive for the reason set forth above. The bis-phenol reducing agents have been known as reducing agent including that of formula (1) claimed in the present claimed invention such as taught in PS'266 and Oya et al, and the compound are equivalent reducing agent taught in Fukui et al. Therefore, it would have been obvious to the worker of ordinary skill in the art to use a compound of formula (I) or its known equivalent in combination with the compound of formula (II) including the compound of formula (III) on page 6, column 1 with an expectation of achieving a material with high sensitivity and provides an image with tone close to pure black such as disclosed in Fukui et al in the abstract, and thereby provide a material as claimed.

The Declaration provided on March 23, 2005 fails to overcome the prima facie case of obviousness of rejection set forth above. The Declaration is not commensurate with the scope of

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the claimed invention. First, the Declaration is directed to the use of the compound as reducing agent silver salt of a aliphatic carboxylic acid having high carbon content such as silver behenate while the scope of the claimed encompasses any type of light-insensitive organic silver salt. See PS'266 page 15, lines 20-25 which discloses that use of o-bisphenols of the bis(hydroxyphenyl) methane series as reducing agent for silver behenate. Therefore, it appears that the phenol reducing agent has been known to use as reducing for silver salt of a aliphatic carboxylic acid having high carbon content such as silver behenate. The Declaration fails to show that the reducing agents presented in the claimed invention can provide an improved results to the other known silver salt of an organic acid taught in the applied prior art of record. Second the ratio of the compound of formula (1) and (3) presented in the Declaration is preferred ranges disclosed in the Fukui et al and the present claimed disclosure, while the scope of the claimed encompasses a non preferred amount. Third, the scope of the claimed invention encompasses R11 and R12 hydrogen, a 3- to 10- membered non-aromatic ring or a 5- to 6-membered aromatic ring group, provided that R11 and R12 are not hydrogen the same time, while the Declaration shows only compound I-1 which contains a 6-membered non-aromatic ring group. The Declaration fails to show as to why the other group within the scope of the claimed invention would provide similar results. The scope of the claimed invention encompasses a number of the compounds that are untested. Accordingly, it is still believed that the invention as claimed would have been found prima facie obvious to the worker of ordinary skill in the art at the time the invention was made.

Conclusion


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6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thorl Chea whose telephone number is (571) 272-1328. The examiner can normally be reached on 9 AM-5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia H. Kelly can be reached on (571)272-1526. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tchea
02-05-2006


Thorl Chea
Primary Examiner
Art Unit 1752